Emissions Inventory Help Sheet for Sand and Gravel Plants

What do I need to report?

Use a separate General Process Form to report information on each source of emissions at your plant. Give each process a unique Process ID number. Include:

- all applicable sources from the list below (each on a separate form),
- vehicles moving on unpaved areas on-site (see Help Sheet for Vehicle Travel on Unpaved Roads),
- gasoline storage (in tanks with capacity of 250-gallon or more, see Help Sheet for Fuel Storage and Handling), and
- internal combustion engines (not emergency backup engines that operated a total of less than 200 hours, nor vehicle engines).

Refer to the "Instructions for Reporting 2002 Annual Air Pollution Emissions", particularly page 3 (assigning ID numbers), page 4 (grouping engines and exclusions) and pages 9–12 (the General Process Form, with examples for engines and unpaved travel). For the processes listed below, determine the total tons of material supplied to each. Remember that some material goes through some processes more than once. For example, if 50 tons of rock are sent through a crusher three times, the total material supplied to the crusher is 150 tons. Do not include wet processes at a wet plant. **For the processes below, report only PM**₁₀ emissions.

General Process Form: Line 2	Line 4	Line 5	<u>Line 9</u>	<u>Line 12</u>	Columns 15 & 16		Column 17
	Tier		Emissions based on:	Unit of	Emission	EF	
Process Name/Description	Code	SCC Code	(examples: 'rock,' 'sand')	Measure	Factor (EF)	Unit	Controlled?
Mining/plant feed, handling	070503	30502505	(name of material)	tons	0.00055	lb/ton	Yes
Surge pile forming, handling	070503	30502505	(name of material)	tons	0.00055	lb/ton	Yes
Crushing with watering ¹ (primary, secondary & tertiary)	070503	30502510	(name of material)	tons	0.00059^{1}	lb/ton	Yes
Screening with watering ¹	070503	30502511	(name of material)	tons	0.00084^1	lb/ton	Yes
Conveyor transfer point ¹	see note 2	30502503	(name of material)	tons	0.000048^1	lb/ton	Yes
Pile forming, handling	see note 2	30502505	(name of material)	tons	0.00055	lb/ton	Yes
Load out, handling WITH watering	see note 2	30502505	(name of material)	tons	0.00055	lb/ton	Yes

The above activities normally use watering to control emissions. These emission factors include watering that produces a moisture content of 1.5% or more. No further capture or control efficiencies may be claimed for these processes. Use the information below for load out without watering.

Load out, handling WITHOUT watering	see note 2	30502506	(name of material)	tons	0.0024	lb/ton	No
Stockpiles, raw material and product storage ³	see note 2	30502507	Average # acres	acres	630^{3}	lbs/acre/yr	No

¹ Reference: U.S. EPA, "Compilation of Air Pollutant Emission Factors: Volume I: Stationary Point and Area Sources" (AP-42), fifth ed. Table 11.19.2-2.

² Use **070503** for processes associated with any rock mining or processing. Use **070599** for other processes, such as a sales lot or concrete plant.

³ The stockpile emission factor above is uncontrolled. You may account for dust control efforts on stockpiles and unpaved travel if you use water or other dust suppressants and if you are in full compliance with the record keeping requirements in Rule 310, Fugitive Dust Sources and/or Rule 316, Nonmetallic Mineral Mining and Processing. Show capture efficiency (in column 19) = 100%. Control efficiency of 70% is allowed for regular watering. The range of acceptable control efficiencies for chemical palliatives (dust suppressants) is 70–90%.